



Wisman' s PRC modular high voltage power supply is ideal for OEM usage. It is specifically designed to meet the needs of applications requiring a hot switched reversible output voltage. The output polarity of the unit can be quickly and safely reversed via the Polarity Control Signal provided on the interface connector.

Both the output voltage and current are fully adjustable via ground referenced remote programming signals such that 0 to 10Vdc corresponds to 0 to 100% rated output voltage and current.

Remote motioning functionality is provided by voltage and current test points such that 0 to 10Vdc corresponds to 0 to 100% rated voltage and current. Additionally remote polarity and mode indicators provide a comprehensive overview of power supply operation.

An optional USB 2.0, RS-232 or RS-422 is available .

TYPICAL APPLICATIONS:

- Electrospinning
- Mass Spectrometry
- Capillary Electrophoresis
- Electrostatic Research
- DNA Analysis
- Microchip Electrophoresis
- Electrostatic Chuck (E-Chuck)

OPTIONS:

- USB USB Interface
- RS232 RS-232 Interface
- RS422 RS-422 Interface
- 5VPM 0 to 5 Volt Programming and Monitor Scaling

SPECIFICATIONS:

Input:

+24Vdc±10% .

Output:

See "CZE SELECTION TABLE"

- **OPTIONAL USB2.0. RS-232 OR RS-422 IS AVAILABLE.**
- **0-30KV, REMOTELY PROGRAMMABLE**
- **0-300uA, REMOTELY PROGRAMMABLE.**
- **POLARITY REVERSIBLE UPON COMMAND IN <1 SEC AT NO LOAD**
- **LOW STORED ENERGY, CURRENT LIMITED OUTPUT.**
- **COST EFFECTIVE MODULAR DESIGN.**
- **LOCAL AND REMOTE CONTROL.**
- **OEM CUSTOMIZATION AVAILABLE.**

Polarity:

Auto reversible via command

Power:

10 watts, maximum

Voltage Regulation:

Load: 0.01% of output voltage no load to full load.

Line: ±0.01% for ±10% change in input voltage.

Ripple:

0.1% Vp-p

Stability:

0.02% per 8 hours after 1/2 hour warm-up.

Environmental:

Operational: 0° C to +40° C

Storage: -40° C to +85° C

Humidity:

10% to 85% RH, non condensing

Cooling:

Free air Convection

Dimensions:

3.5" H x 5.0" W x 10.0" D

(89.00mm x 127.00mm x 254.00mm)

Interface Connector:

25 pin male D connector

CZE SELECTION TABLE

KV	mA	signal	KV	mA	signal
5	2.0	PRC5PN10	20	0.5	PRC20PN10
10	1.0	PRC10PN10	25	0.4	PRC25PN10
15	0.67	PRC15PN10	30	0.3	PRC30PN9

ANALOG INTERFACE CONNECTOR

I/O	Signal	Signal
1	+24Vdc Return	Power Return
2	+24Vdc Return	Power Return
3	+24Vdc Return	Power Return
4	HV Enable/Inhibit	Open or <1Vdc = HV OFF, >3.4Vdc (up to 15Vdc) = HV ON
5	Voltage Test Point	0-10 volts=0 to full scale, Zout=1K Ω
6	Current Test Point	0-10 volts=0 to full scale, Zout=1K Ω
7	Chassis Ground	Ground
8	Remote Voltage Control	0-10 volts = 0 to full scale, Zin=10M Ω
9	Remote Current Control	0-10 volts = 0 to full scale, Zin=10M Ω
10	+10Vdc	+10Vdc Reference Output
11	Signal Return	Signal Return
12	Polarity Control	Open or >3.4Vdc (up to 15Vdc) = Positive Polarity. Grounded or <1Vdc = Negative Polarity
13	Positive Polarity Indicator	+24Vdc sourced through a 100 Ω series limiting resistor. +24Vdc = active signal
14	+24Vdc Input	Power Input
15	+24Vdc Input	Power Input
16	Chassis Ground	Ground
17	Negative Polarity Indicator	+24Vdc sourced through a 100 Ω series limiting resistor. +24Vdc = active signal
18	I Mode Indicator	Open collector pulled up internally to +15Vdc through 2.7k Ω resistor with a 470 Ω limiting resistor in series. Transistor OFF = signal active
19	V Mode Indicator	Open collector pulled up internally to +15Vdc through 2.7k Ω resistor with a 470 Ω limiting resistor in series. Transistor OFF = signal active
20	Return Current Test Point	0 to 10Vdc=0 to 100% rated output current, as measured returned from load. Zout=10k Ω , 1%
21	Load Return	High Voltage Return Point. Required for GFI circuit functionality
22	Ground Fault Indicator	Open collector pulled up internally to +15Vdc through 4.7k Ω resistor with a 470 Ω limiting resistor in series. Transistor OFF = signal active
23	Spare	No Connection
24	Spare	No Connection
25	Spare	No Connection

RS-232, RS-422 DIGITAL INTERFACE

J2	SIGNAL	SIGNAL
1	N/C	No Connection
2	TXD	Transmit Data
3	RXD	Receive Data
4	N/C	No Connection
5	SGND	Signal Ground
6	RA+	RA+ Receive
7	RB-	RB- Receive
8	TB-	TB- Transmit
9	TA+	TB+ Transmit

USB DIGITAL INTERFACE

USB	SIGNAL	SIGNAL
1	VBUS	+5Vdc
2	D-	Data-
3	D+	Data+
4	GND	Ground

DIMENSIONS: in. [mm]

